## CITY OF BRANSON

# 2010 ANNUAL WATER QUALITY REPORT (Consumer Confidence Report)

MO5010096

We are pleased to present to you this year's Annual Water Quality Report. This report is intended to provide you with important information about your drinking water and the efforts made to make sure it is safe. This report is not being mailed to each individual water service customer, however, if you would like a copy please call the Consumer Confidence Hotline at 417-243-2740, or visit our website at bransonmo.gov and click on Utilities. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect your water resources. We are committed to ensuring the quality of your water.

#### Attention!

Este informe contiene informacion muy importante. Traduscalo o prequntele a alguien que lo entienda bien. [Translated: This report contains very important information. Translate or ask someone who understands this very well.]

#### What is the source of my water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and ground water wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.

#### Our water comes from the following sources:

Source Name	<i>Type</i>		
Well #5	<b>Ground Water</b>		
Crosby Well	<b>Ground Water</b>		
Well #7	<b>Ground Water</b>		
Well #9	<b>Ground Water</b>		
Well #10	<b>Ground Water</b>		
Well #11	<b>Ground Water</b>		
Lake Taneycomo Intake 1	Surface Water		
Lake Taneycomo Intake 2	Surface Water		

#### Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Contaminants that may be present in source water include:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### Is our water system meeting other rules that govern our operations?

The Missouri Department of Natural Resources regulates our water system and requires us to test our water on a regular basis to ensure its safety. Our system has been assigned an identification number MO5010096 for the purpose of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are on the following pages of this report.

#### How might I become actively involved?

If you would like to observe the decision making process that affects drinking water quality or if you have any further questions about your drinking water report, please call us at the City of Branson, Consumer Confidence Hotline (417-243-2740) to inquire about scheduled public meetings or contact persons.

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#### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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#### WATER ANALYSIS REPORT

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As shown by the tables below, our water system had no MCL, monitoring, or treatment technique violations during the report period of January 1<sup>st</sup> through December 31<sup>st</sup> 2010. The water you are drinking meets and exceeds all Federal and State requirements. We have found through our monitoring and testing that some contaminants were detected, however all detected results are well within SAFE limits set by the Environmental Protection Agency.

#### Definitions:

MCLG: Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. The MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

90<sup>th</sup> percentile: For lead and Copper testing. 10% of test results are above this level and 90% are below this level.

Level Found: is the average of all test results for a particular contaminant.

Range of Detections: shows the lowest and highest levels found during the test period, if only one sample was taken, then this number equals the Level Found.

MRLDG: Maximum Residual Disinfectant Level Goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health.

MRDL: Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water.

#### Abbreviations:

PPB: Parts Per Billion or micrograms per liter.

PPM: Parts Per Million or milligrams per liter.

n/a: not applicable.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

MFL: Million Fibers per liter, used to measure asbestos concentrations.

nd: Not detectable at testing limits.

The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.

### **Regulated Contaminants**

DISINFECTION BY-PRODUCTS	Unit	MCL	MCLG	RAA	Range	Monitoring Period
Total Haloacetic Acids (HAA5) Sources: By-product of drinking	ppb g water disi	60 Infection	0	42.00	11.4 – 45.3	2010
Total Trihalomethanes Sources: By-product of drinking	ppb g water chlo	80 orination	0	50.00	9.66 - 57.8	2010
CARBON (TOC)	Unit	MCL		Highest Value	Range	Collection Date
Carbon, Total Organic (TOC) Sources: Naturally present in th	ppm ne environm	nent		2.31	1.05 – 2.31	11/17/2010
RADIONUCLIDES	Unit	MCL	MCLG	Highest Value	Range	Collection Date
Gross Alpha Particle Activity, Sources: Erosion of natural depo	pCi/l osits			8.2	6.2 – 8.2	10/14/2008
Radium, Combined (226, 228) Sources: Erosion of natural depo	pCi/l osits	5		1.7	1.4 – 1.7	1/22/2008
Radium – 226	pCi/l	5	0	1.7	1.4 – 1.7	1/22/2008
INORGANIC	Unit	MCL	MCLG	Highest Value	Range	Collection Date
Barium Sources: Discharge of drilling w	ppm vaste; Disch	2 harge from	2 metal refine	0.0289 eries; Erosion of na	0.0284 – 0.0289 tural deposits	3/08/2010
Chromium Sources: Discharge from steel a	ppb nd pulp mil	100 Us	100	1.87	1.76 – 1.87	3/081/2010
Fluoride Sources: Natural deposits; Water	ppm r additive v	4 which pron	4 notes strong	1.87 teeth	0.84 –1.87	3/081/2010
Nitrate + Nitrite (as N) Sources: Runoff from fertilizer u	ppm se; Leachir	10 ng from sep	10 otic tanks, se	0.75 wage; Erosion of n	0.00 – 0.75 atural deposits.	8/16/2010

Copper	Typical Source: Corrosion of household plumbing systems						
	Units	<b>Action Level</b>	90 <sup>th</sup> Percentile	Sites exceeding AL	Ran	ge	
Date	ppm	1.3	0.179	0	0.0261	1 – 0.199	
2008 – 2010	rr						
Lead	Typical Sour	ces: Corrosion of h	ousehold plumbing sy	rstems			
	Units	Action Level	90 <sup>th</sup> Percentile	Sites exceeding AL	R	lange	
Date							
	ppb	15	5.52	0	1.2	5 - 8.34	
2008 - 2010							
Microbiological	_	Result	MCL		MCLG	<b>Typical Source</b>	
COLIFORM, TOTAL	` /	To detectable results w		that collect Less Than 40	0	Naturally present	
	iı	n the calendar year of 2	•	s per Month – No more than we monthly sample		in the environment	

 $\textbf{Turbidity} \ is \ a \ measure \ of \ cloudiness \ in \ water. \ We \ monitor \ turbidity \ because \ it \ is \ a \ good \ indicator \ of \ the \ effectiveness \ of \ our \ filtration \ system.$ 

Percentage of samples	Month occurred	Violation	Highest single	<b>Month Occurred</b>	Sources
in compliance with Std.			measurement for the year		
100	12	NO	.28	June	Soil Runoff

 $\begin{tabular}{ll} \textbf{\it Violations and Health Effects Information} \\ \textbf{\it During the 2010 calendar year, we had the below noted violation(s) of drinking water regulations.} \end{tabular}$ 

#### No Violations Occurred in the Calendar Year of 2010

### OPTIONAL MONITORING (Not required by EPA)

	Highest Value	Range	Unit	Collection Date	MCL	MCLG
ALKALINITY, CACO3 STABILITY	138	137- 138	MG/L	3/08/2010		
ALKALINITY, TOTAL	118	102- 118	MG/L	6/14/2010		
ALUMINUM	0.0133	0.0125- 0.0133	MG/L	3/08/2010	0.05	
BROMOCHLOROACETIC ACID	2.75	2.75	UG/L	8/12/2008		
BROMODICHLOROACETIC ACID	2.27	2.27	UG/L	8/12/2008		
CALCIUM	39.4	39-39.4	MG/L	3/08/2010		
CHLORIDE	10.4	9.68- 10.4	MG/L	3/08/2010	250	
HARDNESS, CARBONATE	127	125- 127	MG/L	3/08/2010		
MAGNESIUM	6.9	6.63- 6.9	MG/L	3/08/2010		
PH	7.64	7.44- 7.64	PH	3/08/2010	8.5	
POTASSIUM	2.19	2.19	MG/L	3/08/2010		
SODIUM	4.48	4.31- 4.48	MG/L	3/08/2010		20
SULFATE	6.8	5.8- 6.8	MG/L	3/08/2010	250	
SOLIDS, TOTAL DISSOLVED (TDS)	162	136- 162	MG/L	3/08/2010	500	

The reported results are based on all required monitoring throughout the entire water system. If you have questions about the water in your area please call us at 417-273-2740